8105-35

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by Hq)
6	OK03549

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition *(Section II)*. File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET *(or other identifier)*		
FANSTEEL METALS	10 Tantalum Place		
C. CITY	**D. STATE**	**E. ZIP CODE**	**F. COUNTY NAME**
Muskogee	OK	74401	Muskogee

G. SITE OPERATOR INFORMATION

1. NAME	2. TELEPHONE NUMBER		
James A. Pierret	(918)687-6303		
3. STREET	**4. CITY**	**5. STATE**	**6. ZIP CODE**
10 Tantalum Place	Muskogee	OK	74401

H. REALTY OWNER INFORMATION *(if different from operator of site)*

1. NAME	2. TELEPHONE NUMBER		
Same			
3. CITY		**4. STATE**	**5. ZIP CODE**

I. SITE DESCRIPTION A metals fabricator which uses a series of waste water settling ponds.

J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION *(complete this section last)*

A. ESTIMATE DATE OF TENTATIVE DISPOSITION *(mo., day, & yr.)*	B. APPARENT SERIOUSNESS OF PROBLEM
	☐ 1. HIGH ☒ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
Gordon Duncan	(214)742-4521	Oct. 7, 1981

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME	2. TITLE	
Gordon Duncan Gordon Duncan	FIT Hydrologist	
3. ORGANIZATION		**4. TELEPHONE NO.** *(area code & no.)*
Ecology & Environment, Inc., 1509 Main St., Dallas, TX 75201		(214)742-4521

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
Sandra K. Antoinette	Ecology & Environment, Inc.	(214)742-4521

C. SITE REPRESENTATIVES INTERVIEWED *(corporate officials, workers, residents)*

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
James H. Pierret	Plant Manager (918)687-6303	10 Tantalum Place, Muskogee, OK
Thomas Carlisle	Services Manager (918)687-6303	10 Tantalum Place, Muskogee, OK

REVIEWED BY (GAEGH) DATE 11/12/81

195944

Continued From Front

III. INSPECTION INFORMATION (continued)

D. GENERATOR INFORMATION (sources of waste)

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
Fansteel Metals	(918)687-6303	10 Tantalum Pl., Muskogee, OK	acid wastewater, acid sludge, lime wastewater & sludge.

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED
N/A			

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS
N/A		

G. DATE OF INSPECTION (mo., day, yr.)	H. TIME OF INSPECTION	I. ACCESS GAINED BY: (credentials must be shown in all cases)
6/23/81	9:00 A.M.	[X] 1. PERMISSION [ ] 2. WARRANT

J. WEATHER (describe)
Warm, clear skys 85° - 90° F

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN (mark 'X')	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
a. GROUNDWATER			
b. SURFACE WATER			
c. WASTE			
d. AIR			
e. RUNOFF			
f. SPILL			
g. SOIL Runoff outfall (Sediment)	X (1)	Houston EPA Lab	Oct. 2, 81
h. VEGETATION			
i. OTHER (specify) Seepage (sediment)	X (1)	Houston EPA Lab	Oct. 2, 81

B. FIELD MEASUREMENTS TAKEN (e.g., radioactivity, explosivity, PH, etc.)

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS
None		

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS: [X] a. GROUND [ ] b. AERIAL

2. PHOTOS IN CUSTODY OF: EPA Region 6 (See Attachments)

D. SITE MAPPED?

[X] YES. SPECIFY LOCATION OF MAPS: Site sketch attached

E. COORDINATES

1. LATITUDE (deg.-min.-sec.): 35°46'26"N

2. LONGITUDE (deg.-min.-sec.): 95°18'13"W

V. SITE INFORMATION

A. SITE STATUS

[X] 1. ACTIVE (Those inductrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

[ ] 2. INACTIVE (Those sites which no longer receive wastes.)

[ ] 3. OTHER(specify): _____ (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

[ ] 1. NO [X] 2. YES(specify generator's four-digit SIC Code): 3339, 3341

C. AREA OF SITE (in acres): 120

D. ARE THERE BUILDINGS ON THE SITE?

[ ] 1. NO [X] 2. YES(specify): 7 (Currently adding one more)

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

	A. TRANSPORTER		B. STORER		C. TREATER		D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION	X	1. LANDFILL
	2. SHIP	X	2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY	X	4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND	X	5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER(specify):		6. OTHER(specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER(specify):
					9. OTHER(specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

[ ] 1. STORAGE [ ] 2. INCINERATION [X] 3. LANDFILL [X] 4. SURFACE IMPOUNDMENT [ ] 5. DEEP WELL

See Attachment "A"

[ ] 6. CHEM/BIO/PHYS TREATMENT [ ] 7. LANDFARM [ ] 8. OPEN DUMP [ ] 9. TRANSPORTER [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

[X] 1. LIQUID [ ] 2. SOLID [X] 3. SLUDGE [ ] 4. GAS

B. WASTE CHARACTERISTICS

[X] 1. CORROSIVE [ ] 2. IGNITABLE [ ] 3. RADIOACTIVE [ ] 4. HIGHLY VOLATILE

[X] 5. TOXIC [ ] 6. REACTIVE [ ] 7. INERT [ ] 8. FLAMMABLE

[ ] 9. OTHER(specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Waste Stream Records

Continue On Reverse

Continued From Front

VII. WASTE RELATED INFORMATION (continued)

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT: 31 Million	AMOUNT: None	AMOUNT: None	AMOUNT: 133,000	AMOUNT: None	AMOUNT: None
UNIT OF MEASURE: lbs/yr	UNIT OF MEASURE:	UNIT OF MEASURE:	UNIT OF MEASURE: gal/day	UNIT OF MEASURE:	UNIT OF MEASURE:
(1) PAINT, PIGMENTS	(1) OILY WASTES	(1) HALOGENATED SOLVENTS	X (1) ACIDS: Wastewater	(1) FLYASH	(1) LABORATORY, PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER (specify):	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (specify):	(3) CAUSTICS	(3) MILLING/MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMELTING WASTES	(4) MUNICIPAL
X (5) OTHER (specify): Acid wastewater sludge, lime wastewater sludge			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER (specify):
			(6) CYANIDE	(6) OTHER (specify):	
			(7) PHENOLS		
			(8) HALOGENS		
			X (9) PCB		
			X (10) METALS		
			X (11) OTHER (specify): Lime wastewater *See Attachment A		

c. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE (place in descending order of hazard)

1. SUBSTANCE	2. FORM (mark 'X') a. SOLID	b. LIQ.	c. GAS	3. TOXICITY (mark 'X') a. HIGH	b. MED.	c. LOW	d. NONE	4. CAS NUMBER	5. AMOUNT	6. UNIT
Beryllium	X							7440-41-7	3.8	ppm
Chromium	X							7440-47-3	59.9	ppm
Lead	X							7439-92-1	60.5	ppm
Nickel	X							7440-02-0	39.6	ppm
Ammonium fluoride		X						12115-01-8	Unknown	
Calcium fluoride		X						7789-75-5	"	
Potassium fluoride		X						7789-23-3	"	
Ammonium hydroxide		X						1136-21-6	"	
Residue sludge	X							None	35	M^3/yr
Calcium oxide		X						1305-78-8	Unknown	
Sodium fluoride		X						7681-49-4	"	
Ammonium sulfate		X						7783-20-2	"	
Arochlor (PCB) 1254		X						11097-69-1	5.17	ppm

Note: The levels of arochlor (PCB) 1254 found in the sediment samples taken appears to be excessive. Also, the levels of chromium, lead, nickel & beryllium (See Attach. A)

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

— A. HUMAN HEALTH HAZARDS

Continue On Page 5

Continued From Page 4

VIII. HAZARD DESCRIPTION (continued)

☐ B. NON-WORKER INJURY/EXPOSURE

☐ C. WORKER INJURY/EXPOSURE

☐ D. CONTAMINATION OF WATER SUPPLY

☐ E. CONTAMINATION OF FOOD CHAIN

☒ F. CONTAMINATION OF GROUND WATER

OSDH files indicate probable groundwater contamination originating from an acid sludge deposit on site. No monitor wells were sampled during the inspection but sampling is recommended in the future.

☒ G. CONTAMINATION OF SURFACE WATER

Both runoff sediment samples taken during the inspection contained increased levels of aroclor 1254 (PCB) and other contaminants (see VII D). The samples were taken from downdip runoff paths which then flow directly into the Arkansas River.

Although there is a transformer sub-station on-site (see aerial photos), it cannot be determined if this is where the PCB's originated. Further sampling is recommended to determine the extent of off-site contamination.

Continue On Reverse

Continued From Front

VIII. HAZARD DESCRIPTION (continued)

☐ H. DAMAGE TO FLORA/FAUNA

☐ I. FISH KILL

☐ J. CONTAMINATION OF AIR

☒ K. NOTICEABLE ODORS

Odors of ammonia and methlethylketone noted during inspection.

☒ L. CONTAMINATION OF SOIL

Slightly stained soil off site at sample point #1.

☐ M. PROPERTY DAMAGE

Continue On Page 7

Continued From Page 6

VIII. HAZARD DESCRIPTION (continued)

☐ N. FIRE OR EXPLOSION

☒ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

Standing liquids noted at several areas on site. Lime pile near standing surface runoff.

☐ P. SEWER, STORM DRAIN PROBLEMS

☐ Q. EROSION PROBLEMS

☐ R. INADEQUATE SECURITY

☐ S. INCOMPATIBLE WASTES

VIII. HAZARD DESCRIPTION (continued)

☐ T. MIDNIGHT DUMPING

☒ U. OTHER (specify):

The site sketch shows the location of only 5 of 12 monitor wells located on site. Plant management requires a written EPA request for the location of the other wells.

It is recommended that EPA obtain this information so that a sampling plan can be developed.

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE (specify units)
1. IN RESIDENTIAL AREAS	0	0	0	¼ Mile
2. IN COMMERCIAL OR INDUSTRIAL AREAS	0	0	0	¼ Mile
3. IN PUBLICLY TRAVELLED AREAS	5,000	5,000	0	¼ Mile
4. PUBLIC USE AREAS (parks, schools, etc.)	0	0	0	¼ Mile

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER (specify unit)	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
45 Ft.	East toward Arkansas River	None
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY (specify unit of measure)**	**F. DIRECTION TO DRINKING WATER SUPPLY**
250 gpm	7 Miles	NNE

G. TYPE OF DRINKING WATER SUPPLY

☐ 1. NON-COMMUNITY < 15 CONNECTIONS* ☒ 2. COMMUNITY (specify town): Mallard Bay (Fort Gibson Lake) > 15 CONNECTIONS

☒ 3. SURFACE WATER ☐ 4. WELL

Continue On Page 9

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA (continued)

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/buildings)	4. NON-COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')
None				

I. RECEIVING WATER

1. NAME: Arkansas River

☐ 2. SEWERS ☒ 3. STREAMS/RIVERS ☐ 4. LAKES/RESERVOIRS ☐ 5. OTHER (specify):

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

Arkansas River suitable for navigation, fish and wildlife propogation, primary and secondary recreation, water supply.

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☐ B. KARST ZONE ☒ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK (specify below)	'X'	C. OTHER (specify below)
X	1. SAND	X	Shale (45' to 50' deep)		
X	2. CLAY				
	3. GRAVEL				

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH (100,000 to 1000 cm/sec.) ☐ C. HIGH (1000 to 10 cm/sec.)

☒ D. MODERATE (10 to .1 cm/sec.) ☐ E. LOW (.1 to .001 cm/sec.) ☐ F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

☐ 1. YES ☒ 2. NO 3. COMMENTS: Flood plain alluvium

H. DISCHARGE AREA

☐ 1. YES ☒ 2. NO 3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE: 1 - 3

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.: East - good

J. OTHER GEOLOGICAL DATA

Sandy clays are predominant in flood plain.

 Continue On Reverse

Continued From Front

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X')		
					1. YES	2. NO	3. UNKNOWN
NPDES	OWRB	OK1643	8/12/79	12/31/80	X		
NRC	NRC	NRC930	Unknown	Unknown	X		
State Water	OWRB	CW69020	Unknown	Unknown			X

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

[X] NONE [ ] YES (summarize in this space)

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition *(Section II)* information on the first page of this form.

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT
Acid Wastewater Settling Pond (#1 - aerial photo)

2. STABILITY/CONDITION OF EMBANKMENTS
Good

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*
☐ YES ☒ NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE
☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT
☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT
☒ YES ☐ NO

7. IMPOUNDMENT HAS LINER SYSTEM
☒ YES ☐ NO Plastic

7a. INTEGRITY OF LINER SYSTEM CHECKED
☒ YES ☐ NO

7b. FINDINGS
Liner appears stable. No visible significant defects.

8. SOIL STRUCTURE AND SUBSTRUCTURE
Alluvium. Sandy clay and shale.

9. MONITORING WELLS
☒ YES ☐ NO

10. LENGTH, WIDTH, AND DEPTH
LENGTH 400 ft. WIDTH 230 ft. DEPTH 28 ft.

11. CALCULATED VOLUMETRIC CAPACITY
2,576,000 $ft.^3$

12. PERCENT OF CAPACITY REMAINING
25%

13. ESTIMATE FREEBOARD
7 Ft.

14. SOLIDS DEPOSITION
☒ YES ☐ NO

15. DREDGING DISPOSAL METHOD
Material dredged and deposited on site (see aerial photo)

16. OTHER EQUIPMENT

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT

Lime neutralized wastewater settling pond (#4 aerial photo)

2. STABILITY/CONDITION OF EMBANKMENTS

Good

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*

☐ YES ☒ NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE

☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT

☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT

☒ YES ☐ NO

7. IMPOUNDMENT HAS LINER SYSTEM

☒ YES ☐ NO Plastic

7a. INTEGRITY OF LINER SYSTEM CHECKED

☒ YES ☐ NO

7b. FINDINGS

Liner appears good. No visible significant defects.

8. SOIL STRUCTURE AND SUBSTRUCTURE

Sandy clay and shale.

9. MONITORING WELLS

☒ YES ☐ NO

10. LENGTH, WIDTH, AND DEPTH

LENGTH 350 ft. WIDTH 350 ft. DEPTH 25 ft.

11. CALCULATED VOLUMETRIC CAPACITY

3,062,500 ft.^{3}

12. PERCENT OF CAPACITY REMAINING

20%

13. ESTIMATE FREEBOARD

5 ft.

14. SOLIDS DEPOSITION

☒ YES ☐ NO

15. DREDGING DISPOSAL METHOD

Solids have not been dredged to date. Mat'l. building up.

16. OTHER EQUIPMENT

System has a french drain.

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT
Lime Settling Overflow Pond (#5 aerial photo)

2. STABILITY/CONDITION OF EMBANKMENTS
Good

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*
☐ YES ☒ NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE
☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT
☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT
☒ YES ☐ NO

7. IMPOUNDMENT HAS LINER SYSTEM
☐ YES ☒ NO

7a. INTEGRITY OF LINER SYSTEM CHECKED
☐ YES ☐ NO N/A

7b. FINDINGS

8. SOIL STRUCTURE AND SUBSTRUCTURE
Sandy clay and shale. Alluvial deposits.

9. MONITORING WELLS
☒ YES ☐ NO On plant site.

10. LENGTH, WIDTH, AND DEPTH
LENGTH 200 Ft. WIDTH 150 Ft. DEPTH 5 Ft.

11. CALCULATED VOLUMETRIC CAPACITY
150,000 Ft.

12. PERCENT OF CAPACITY REMAINING
30 %

13. ESTIMATE FREEBOARD
1.5 Ft.

14. SOLIDS DEPOSITION
☒ YES ☐ NO

15. DREDGING DISPOSAL METHOD
None to date.

16. OTHER EQUIPMENT

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT
Lime Settling Overflow Pond (#6 aerial photo)

2. STABILITY/CONDITION OF EMBANKMENTS
Good

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*
☐ YES ☒ NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE
☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT
☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT
☒ YES ☐ NO

7. IMPOUNDMENT HAS LINER SYSTEM
☐ YES ☒ NO

7a. INTEGRITY OF LINER SYSTEM CHECKED
☐ YES ☐ NO N/A

7b. FINDINGS

8. SOIL STRUCTURE AND SUBSTRUCTURE
Sandy clay and shale. Alluvial deposits.

9. MONITORING WELLS
☒ YES ☐ NO

10. LENGTH, WIDTH, AND DEPTH
LENGTH 100 ft. WIDTH 75 ft. DEPTH 5 Ft.

11. CALCULATED VOLUMETRIC CAPACITY
37,500 $ft.^3$

12. PERCENT OF CAPACITY REMAINING
10%

13. ESTIMATE FREEBOARD
0.5 Ft.

14. SOLIDS DEPOSITION
☒ YES ☐ NO

15. DREDGING DISPOSAL METHOD
None to date.

16. OTHER EQUIPMENT

LANDFILLS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc)*
☐ YES ☒ NO

2. EVIDENCE OF IMPROPER DISPOSAL OF BULK LIQUIDS, SEMI-SOLIDS AND SLUDGES INTO THE LANDFILL
☒ YES ☐ NO Acid sludge from wastewater pit (#2 aerial photo)

3. CHECK RECORDS OF CELL LOCATION AND CONTENTS AND BENCHMARK
☒ YES ☐ NO Only contains acid sludge waste.

4. WASTES SURROUNDED BY SORBENT MATERIAL
☐ YES ☒ NO

5. DIVERSION STRUCTURES ARE EFFECTIVELY CONSTRUCTED AND PROPERLY MAINTAINED
☒ YES ☐ NO Sludges deposited in old surface impoundment. Diked.

6. EVIDENCE OF PONDING OF WATER ON SITE
☒ YES ☐ NO Very slight ponding on plastic liner cover.

7. EVIDENCE OF IMPROPER/INADEQUATE DRAINING
☐ YES ☒ NO

8. ADEQUATE LEACHATE COLLECTION SYSTEM *(If "Yes", specify Type)*
☐ YES ☒ NO

8a. SURFACE LEACHATE SPRING
☐ YES ☒ NO

9. RECORDS OF LEACHATE ANALYSIS
☐ YES ☒ NO

10. GAS MONITORING
☐ YES ☒ NO

11. GROUNDWATER MONITORING WELLS
☒ YES ☐ NO

12. ARTIFICIAL MEMBRANE LINER INSTALLED
☐ YES ☒ NO

13. SPECIFIC CONTAINMENT MEASURES *(Clay Bottom, Sides, etc)*
☒ YES ☐ NO Sand and clay bottom

14. FIXATION *(Stabilization)* OF WASTE
☐ YES ☒ NO

15. ADEQUATE CLOSURE OF INACTIVE PORTION OF FACILITY
☐ YES ☒ NO

16. COVER *(Type)*
Plastic liner (see photos #2 & #3). Some holes visible in liner.

16a. THICKNESS

16b. PERMEABILITY

16c. DAILY APPLICATION
☐ YES ☐ NO

LANDFILLS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc)*
☐ YES ☒ NO

2. EVIDENCE OF IMPROPER DISPOSAL OF BULK LIQUIDS, SEMI-SOLIDS AND SLUDGES INTO THE LANDFILL
☐ YES ☒ NO

3. CHECK RECORDS OF CELL LOCATION AND CONTENTS AND BENCHMARK
☐ YES ☒ NO

4. WASTES SURROUNDED BY SORBENT MATERIAL
☐ YES ☒ NO

5. DIVERSION STRUCTURES ARE EFFECTIVELY CONSTRUCTED AND PROPERLY MAINTAINED
☒ YES ☐ NO Plant solid waste (scrap metal, paper, etc.) dumped in old surface impoundment (aerial # 7 photo).

6. EVIDENCE OF PONDING OF WATER ON SITE
☐ YES ☒ NO

7. EVIDENCE OF IMPROPER/INADEQUATE DRAINING
☒ YES ☐ NO Water may pond in old impoundment

8. ADEQUATE LEACHATE COLLECTION SYSTEM *(If "Yes", specify Type)*
☐ YES ☒ NO

8a. SURFACE LEACHATE SPRING
☐ YES ☒ NO

9. RECORDS OF LEACHATE ANALYSIS
☐ YES ☒ NO

10. GAS MONITORING
☐ YES ☒ NO

11. GROUNDWATER MONITORING WELLS
☒ YES ☐ NO On site.

12. ARTIFICIAL MEMBRANE LINER INSTALLED
☐ YES ☒ NO

13. SPECIFIC CONTAINMENT MEASURES *(Clay Bottom, Sides,etc)*
☒ YES ☐ NO Diked impoundment.

14. FIXATION *(Stabilization)* OF WASTE
☐ YES ☒ NO

15. ADEQUATE CLOSURE OF INACTIVE PORTION OF FACILITY
☐ YES ☐ NO N/A

16. COVER*(Type)*

None

16a. THICKNESS

N/A

16b. PERMEABILITY

N/A

16c. DAILY APPLICATION
☐ YES ☐ NO

N/A

STORAGE FACILITIES SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. STORAGE AREA HAS CONTINUOUS IMPERVIOUS BASE
[ ] YES [X] NO

2. STORAGE AREA HAS A CONFINEMENT STRUCTURE
[X] YES [ ] NO Area is diked.

3. EVIDENCE OF LEAKAGE/OVERFLOW *(If "Yes", document where and how much runoff is overflowing or leaking from containment)*
[X] YES [ ] NO The open area contains a pile of lime (see Panorama #1, and #3 aerial photo) that is used in the neutralization process. The lime is improperly stored and allows surface water runoff to carry the lime through the dike to off site.

4. ESTIMATE TYPE AND NUMBER OF BARRELS/CONTAINERS
N/A Open storage of lime in a pile.

5. GLASS OR PLASTIC STORAGE CONTAINERS USED
[ ] YES [X] NO

6. ESTIMATE NUMBER AND CAPACITY OF STORAGE TANKS
N/A

7. NOTE LABELING ON CONTAINERS
N/A

8. EVIDENCE OF LEAKAGE CORROSION OR BULGING OF BARRELS/CONTAINERS/STORAGE TANKS *(If "Yes", document evidence. Describe location and extent of damage. Take PHOTOGRAPHS)*
[ ] YES [ ] NO
N/A

9. DIRECT VENTING OF STORAGE TANKS
[ ] YES [ ] NO N/A

10. CONTAINERS HOLDING INCOMPATIBLE SUBSTANCES *(If "Yes", document evidence. Describe location and identity of hazardous waste. Take PHOTOGRAPHS.)*
[ ] YES [X] NO
N/A

11. INCOMPATIBLE SUBSTANCES STORED IN CLOSE PROXIMITY *(If "Yes", document evidence. Describe location and identity of hazardous waste. Take PHOTOGRAPHS.)*
[ ] YES [X] NO

12. ADEQUATE CONTAINER WASHING AND REUSE PRACTICES
[ ] YES [ ] NO N/A

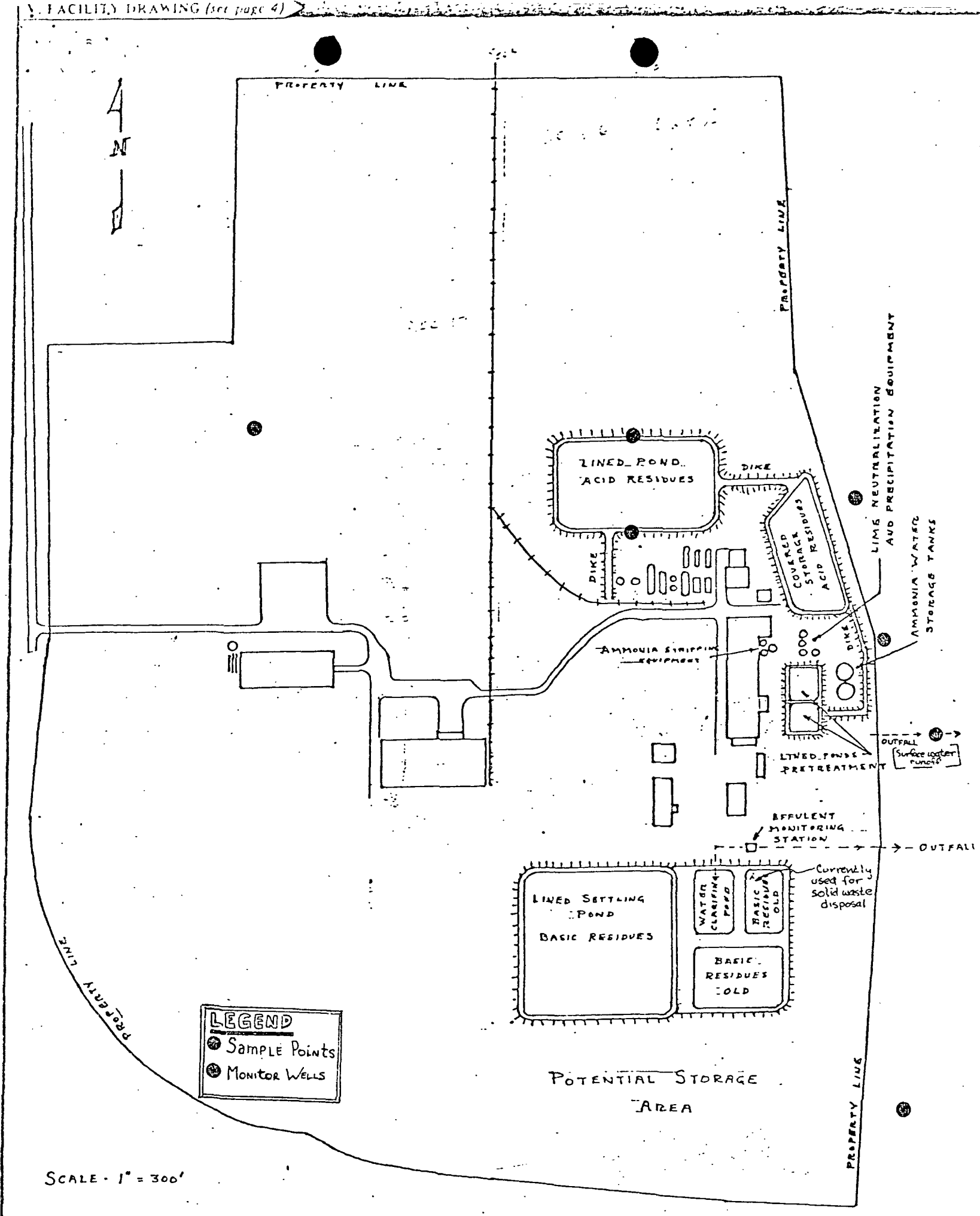
13. ADEQUATE PRACTICES FOR DISPOSAL OF EMPTY STORAGE CONTAINERS
[ ] YES [ ] NO N/A

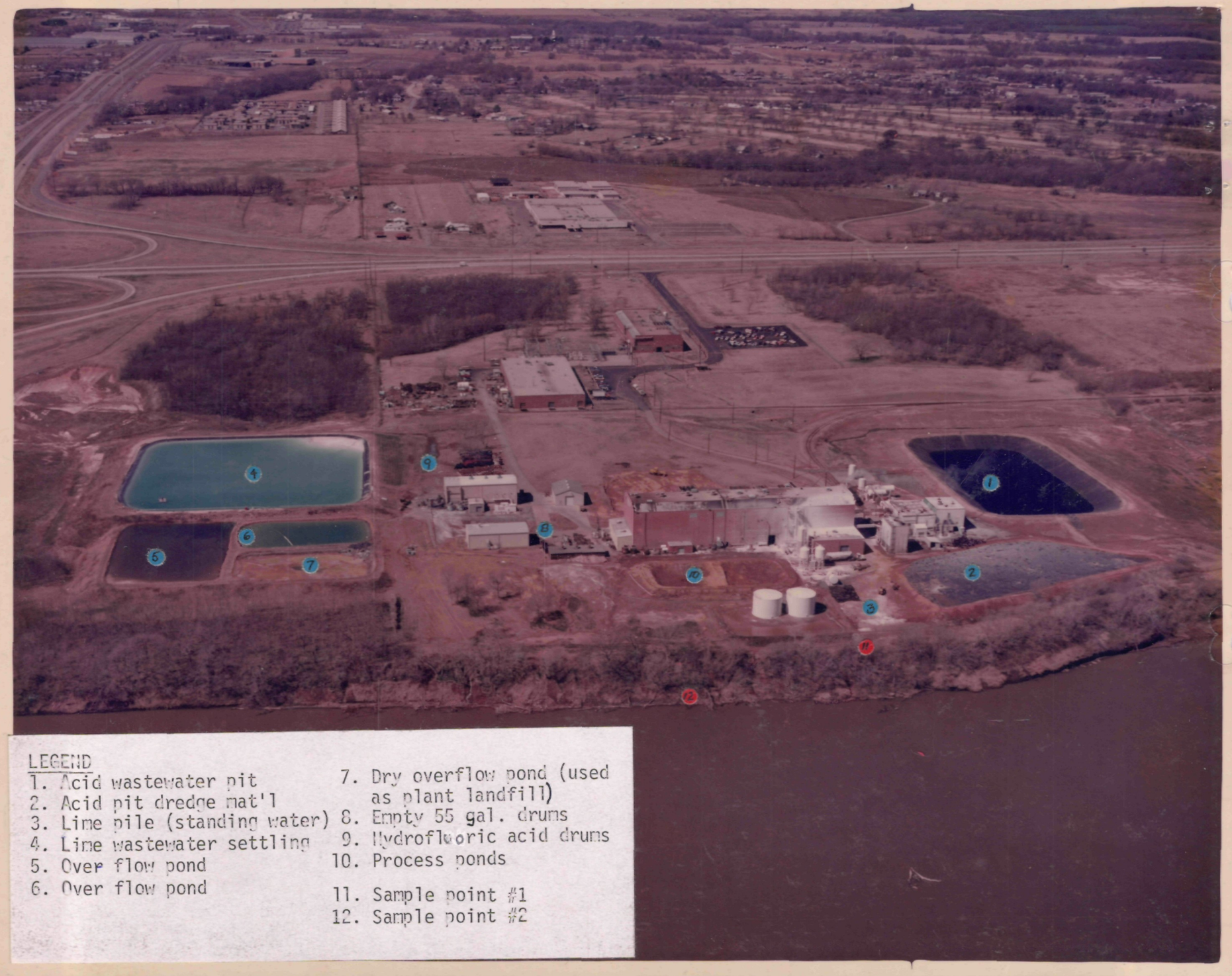
ATTACHMENT A

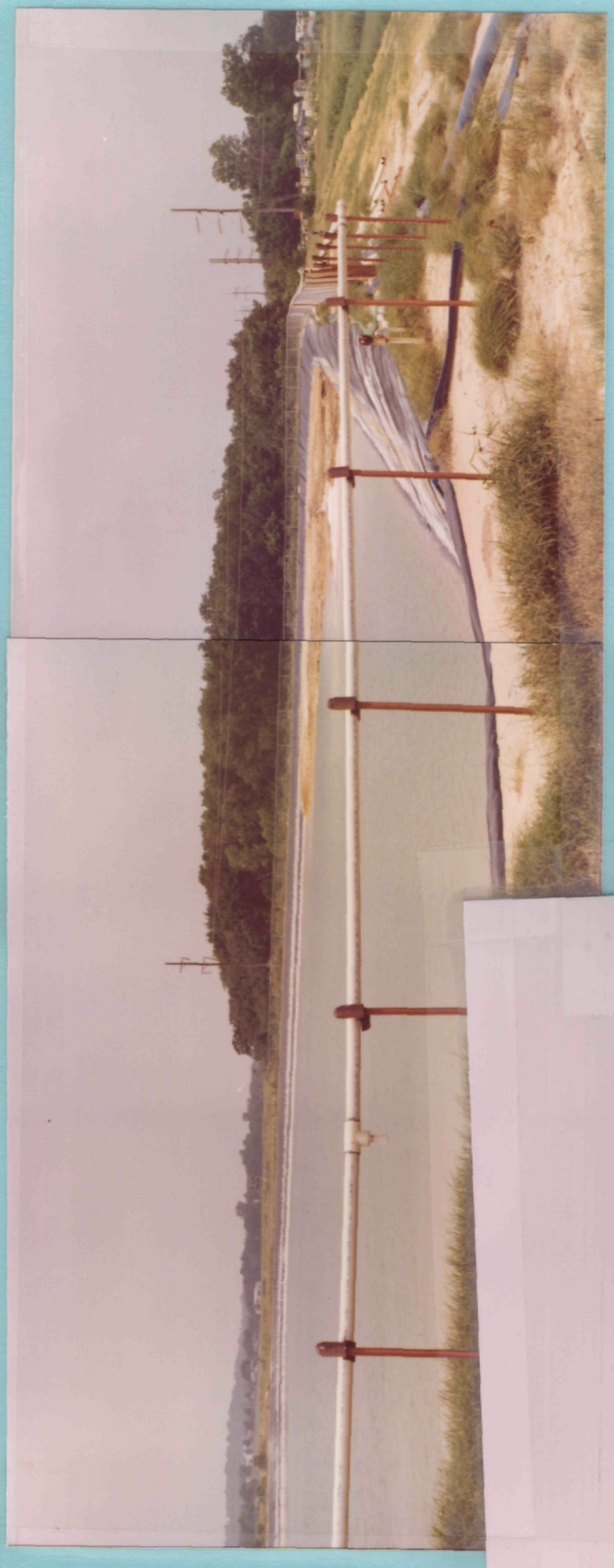
POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT SUPPLEMENT SHEET

Instruction - This sheet is provided to give additional information in explanation of a question on the form T2070-3.

Corresponding number on form	Additional Remark and/or Explanation
IV. E, 3	A landfill supplemental report is used to describe condition of old surface impoundment currently used to dispose of acid sludges.
VII, 2, d	Of the 133,000 gpd, approximately 130,000 gpd is lime wastewater. The remaining 3000 gpd is acid wastewater.
VII.D.	detected slightly exceeded the mean background levels for the eastern U.S. *USGS Geological Survey Professional Paper 574-F, 1975).


4
N
PROPERTY LINE
PROPERTY LINE
LINED POND
ACID RESIDUES
DIKE
DIKE
COVERED STORAGE ACID RESIDUES
LIME NEUTRALIZATION AND PRECIPITATION EQUIPMENT
AMMONIA WATER STORAGE TANKS
AMMONIA STRIPPING EQUIPMENT
DIKE
OUTFALL
Surface water runoff
LINED POND PRETREATMENT
EFFLUENT MONITORING STATION
OUTFALL
LINED SETTLING POND
BASIC RESIDUES
WATER CLARIFIER POND
BASIC RESIDUE OLD
BASIC RESIDUES OLD
Currently used for solid waste disposal
LEGEND
Sample Points
Monitor Wells
PROPERTY LINE
POTENTIAL STORAGE AREA
PROPERTY LINE
SCALE - 1" = 300'


LEGEND
1. Acid wastewater pit
2. Acid pit dredge mat'l
3. Lime pile (standing water)
4. Lime wastewater settling
5. Over flow pond
6. Over flow pond
7. Dry overflow pond (used as plant landfill)
8. Empty 55 gal. drums
9. Hydrofluoric acid drums
10. Process ponds
11. Sample point #1
12. Sample point #2



Photographer / Witness (PANORAMA #2)

SANDRA ANTOINETTE / GORDON DUNCAN

Date / Time / Direction

JUNE 23, 1981 / 1120 / WEST TO SOUTH

Comments: PHOTO OF LIME SETTLING POND. OVERFLOW RUNS INTO TWO ADJACENT SETTLING PONDS (SEE PHOTO #4)

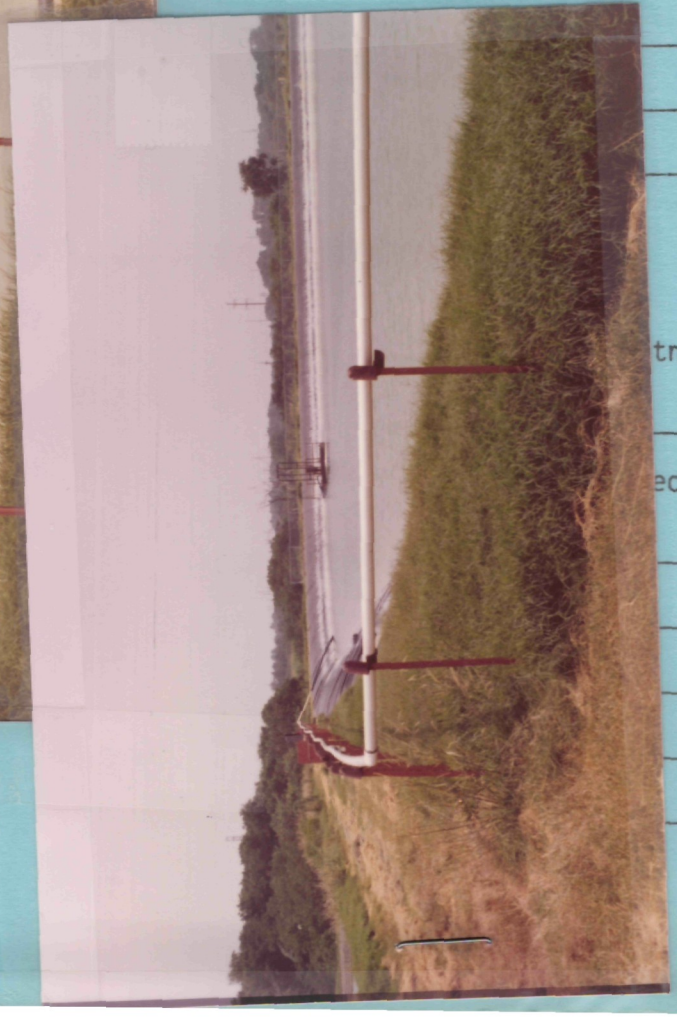
Photographer / Witness

Date / Time / Direction

Comments:

tness

ection



Photographer / Witness PHOTO #1

SANDRA KUKLISH ANTOINETTE / GORDON DUNCAN

Date / Time / Direction

6-23-81 / 1100 / WEST

Comments: ACID WASTEWATER PIT WITH NRC RUNOFF PATH. STANDING WATER IN FOREGROUND. LINER IN GOOD CONDITION

Photographer / Witness PHOTO #2

SANDRA ANTOINETTE / GORDON DUNCAN

Date / Time / Direction

6-23-81 / 1057 / SOUTH

Comments: ACID SLUDGE FROM ACID PIT (PHOTO #1) COVERED WITH LINER. LINER IN FAIR CONDITION. SLUDGE DEPOSITED EAST OF ACID PIT.

Photographer / Witness PHOTO #3

SANDRA ANTOINETTE / GORDON DUNCAN

Date / Time / Direction

6-23-81 / 1105 / NW

Comments: ACID SLUDGE

Photographer / Witness PHOTO #4

SANDRA ANTOINETTE / GORDON DUNCAN

Date / Time / Direction

6·23·81 / 1120 / SW

Comments: PHOTOS OF #2 & #3 LIME SETTLING PONDS. FLUIDS IN THESE PONDS COMES FROM MAIN LIME SETTLING POND [redacted]

Photographer / Witness PHOTO #5

SANDRA ANTOINETTE / GORDON DUNCAN

Date / Time / Direction

6·23·81 / 1109 / NW

Comments: EMPTY TIN SLAG DRUMS (foreground) and FULL HYDROFLUORIC-CHLORIC ACID DRUMS (left background). NORTH OF LIME POND.

Photographer / Witness PHOTO #6

SANDRA ANTOINETTE / GORDON DUNCAN

Date / Time / Direction

6·23·81 / 1127 / NW

Comments: OLD LIME SETTLING POND CURRENTLY BEING USED AS ON-SITE SOLID WASTE LANDFILL.

Photographer / Witness PHOTO #7

SANDRA ANTOINETTE/GORDON DUNCAN

Date / Time / Direction

June 23, 1981 / 1205 / WEST

Comments: SAMPLE POINT #1. SAMPLE OF SEDIMENT OF SEEPAGE THROUGH DIKE TO OFF SITE. (SEE AERIAL PHOTOGRAPH FOR SAMPLE POINT REFERENCE)

Photographer / Witness

Date / Time / Direction

Comments:

Photographer / Witness PHOTO #8

SANDRA ANTOINETTE

Date / Time / Direction

6·23·81 / 1215 / EAST

Comments: SURFACE WATER RUNOFF OUTFALL INTO ARKANSAS RIVER. SAMPLE #2 TAKEN DOWNDIP FROM THIS POINT. SEE AERIAL PHOTO FOR SAMPLE POINT REFERENCE

STANDING WATER SEEPING THROUGH DIKE. SAMPLE #1 TAKEN ON OPPOSITE SIDE OF FENCE

Photographer / Witness (PANORAMA #1)

SANDRA KUKLISH / GORDON DUNCAN

Date / Time / Direction

JUNE 23, 1981 / 1109 / SOUTH TO EAST

Comments: PANORAMA OF OPEN LIME PILE AND EMPTY TIN SLAG DRUMS. RUNOFF GOES THROUGH LIME PILE AND COLLECTS NEAR DIKE.

Photographer / Witness

Date / Time / Direction

Comments:

Photographer / Witness

Date / Time / Direction

Comments:

FEDERAL EXPRESS

PLEASE COMPLETE INFORMATION IN THE 5 BLOCKS OUTLINED IN ORANGE
SEE BACK OF FOR FOR COMPLETE PREPARATION INSTRUCTIONS.

AIRBILL NUMBER 0093146104

YOUR FEDERAL EXPRESS ACCOUNT NUMBER

DATE June 24 (84)

FROM (Your Name) Gordon Duncan

COMPANY DEPARTMENT/FLOOR NO.

STREET ADDRESS

CITY STATE

TO (Recipient's Name) Ed Langley

If Hold For Pick-Up or Saturday Delivery, Recipient's Phone Number

COMPANY EPA Houston Lab DEPARTMENT/FLOOR NO.

STREET ADDRESS (P.O. BOX NUMBERS ARE NOT DELIVERABLE) 6616 Hornweed Dr.

CITY Houston STATE Tx

ZIP ACCURATE ZIP CODE REQUIRED FOR CORRECT INVOICING

ZIP ACCURATE ZIP CODE REQUIRED FOR OVERNIGHT DELIVERY 77074

AIRBILL NO. 0093146104

IN TENDERING THIS SHIPMENT, SHIPPER AGREES THAT F.E.C. SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM CARRIAGE HEREOF. F.E.C. DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THIS SHIPMENT. THIS IS A NON-NEGOTIABLE AIRBILL SUBJECT TO CONDITIONS OF CONTRACT SET FORTH ON REVERSE OF SHIPPER'S COPY, UNLESS YOU DECLARE A HIGHER VALUE, THE LIABILITY OF FEDERAL EXPRESS CORPORATION IS LIMITED TO $100.00.

YOUR NOTES/REFERENCE NUMBERS (FIRST 12 CHARACTERS WILL ALSO APPEAR ON INVOICE)

SAM 06816535 FANSTEEL/ALTES

PAYMENT ☐ Bill Shipper ☐ Bill Recipient's F.E.C. Acct. ☐ Bill 3rd Party F.E.C. Acct. ☑ Bill Credit Card

☐ Cash In Advance Account Number/Credit Card Number

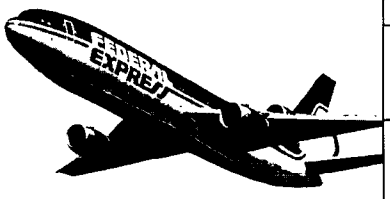
SERVICES CHECK ONLY ONE BOX	DELIVERY AND SPECIAL HANDLING CHECK SERVICES REQUIRED
PRIORITY ONE (P-1)	1 ☐ HOLD FOR PICK-UP AT FOLLOWING FEDERAL EXPRESS LOCATION SHOWN IN SERVICE GUIDE
1 ☒ OVERNIGHT PACKAGES) 6 ☐	
COURIER PAK 7 ☐	
2 ☐ OVERNIGHT ENVELOPE (Up to 2 LBS.) 8 ☐	2 ☒ DELIVER
3 ☐ OVERNIGHT BOX (Up to 5 LBS.) 9 ☐	3 ☐ SATURDAY SERVICE REQUIRED See Reverse (Extra charge applies for delivery)
4 ☐ OVERNIGHT TUBE (Up to 5 LBS.)	4 ☐ RESTRICTED ARTICLES SERVICE (P-1 and Standard Air Packages only, extra charge)
STANDARD AIR	5 ☐ SSS (Signature Security Service required, extra charge applies)
5 ☐ DELIVERY 2ND BUSINESS DAY FOLLOWING PICK UP	6 ☐ DRY ICE _____ LBS.
	7 ☐ OTHER SPECIAL SERVICE _____
"OVERNIGHT" IS DEFINED AS NEXT BUSINESS DAY (MONDAY THROUGH FRIDAY). SEE SPECIAL HANDLING FOR SATURDAY DELIVERY.	8 ☐ _____
	9 ☐

PIECES	WEIGHT	DECLARED VALUE	O/S
1	13		
TOTAL 1	TOTAL 13	TOTAL	

RECEIVED AT
☐ SHIPPER'S DOOR
☐ REGULAR STOP
☐ ON-CALL STOP
☑ F.E.C. LOC. [illegible]

Federal Express Corporation Employee No. [illegible]

DATE/TIME For Federal Express Use [illegible]



FEDERAL EXPRESS USE

FREIGHT CHARGES

DECLARED VALUE CHARGE

AGT/PRO ADVANCE ORIGIN

AGT/PRO ADVANCE DESTINATION

OTHER

TOTAL CHARGES

PART # 2041734049
REVISION DATE 5-15-80
PRINTED USA

SHIPPER'S COPY

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
OK 3549	Fansteel Metals

SAMPLERS: (Signature)
Gordon Duncan

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Priority B	REMARKS
01	6/23/81	1205		X	Groundwater seep. 5 feet from east property fence line.	1	X	Tag # 6-1819
02	6/23/81	1215		X	Surface water runoff, East drainage outfall. 50' E of fence	1	X	Tag # 6-1820
[redacted]	[redacted]							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Gordon Duncan	6/26/81 0130	Federal Express			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
				AIRBILL #0093146104	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files